

158 – 185 GHz Source Type 1210B-SL

Product Description

158-178 GHz Source represents an Active Multiplier Chain based on high performance Microwave/MM-Wave components, followed by an ACST high-power MM-Wave multiplier. The source is designed and manufactured as a bench top unit to extend the low frequency synthesizer or sweeper without losing all of the functionalities and features.

The source is fixed tuned and does not require any adjustment for proper operation. All required voltage biases and current sources are provided by a dedicated power supply unit, which only needs a standard AC power. A TTL modulation port and/or an user-controlled attenuator can be integrated on customer request.



Fig. 1: Optical view of the product

Application Areas

- MM-wave FMCW-Radar
- Active imaging
- LO Source for MM/SubMM wave receiver arrays
- High-bit rate data transmission systems

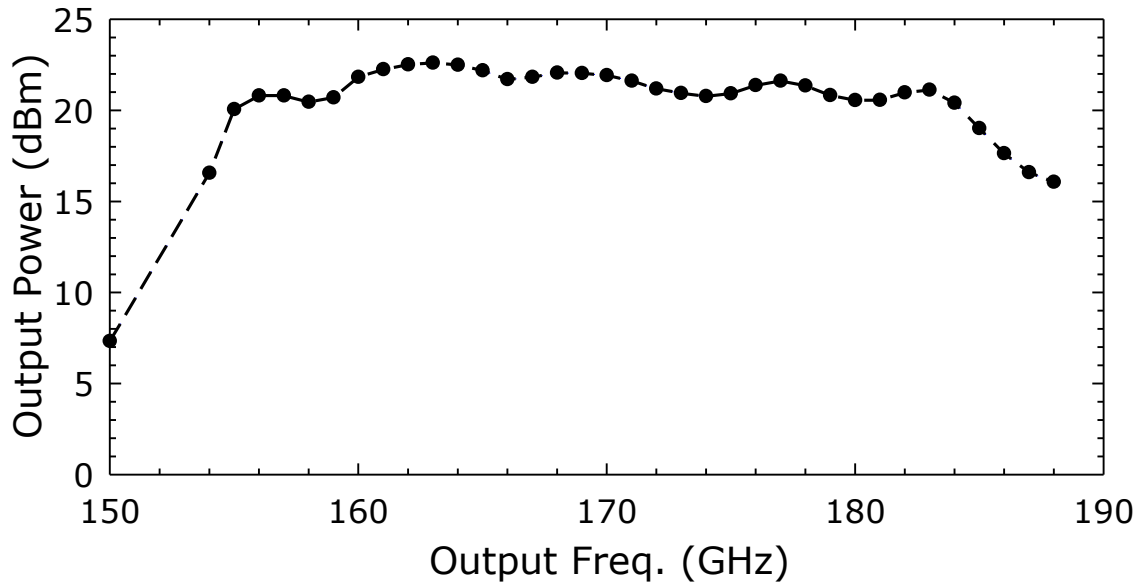
Product Features

- High power & Efficiency
- Large bandwidth
- Flat response
- TTL-modulation port (optional)
- User controlled attenuation (optional)

Tab. 1: Technical Specifications

Technical Specifications	Minimum	Typ.	Maximum
Input Port (Coax)		K-Type	
Input Frequency (GHz)	12.91		15.42
Input Power (dBm)	0	5	10
Output Port (UG 387/U-M)		WR-5.1	
Output Frequency (GHz)	155		185
Output Power (dBm)		20	22.5

Typical Performance



Notes

- All values presented based on finished design and experimental experiences.
- All tests are carried out at a room temperature of 24 °C.

Caution

- Absolute maximum ratings should not be used under normal operating conditions. Exceeding maximum ratings may lead to permanent failure.
- Any foreign body inserted into the waveguide will cause a loss of performance and may damage the device.

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